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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/477,954	01/05/2000	JONATHAN LEE SULLIVAN		9970

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EXAMINER

NGUYEN, KHAI MINH

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/477,954

Applicant(s)

SULLIVAN, JONATHAN LEE

Examiner

Khai M. Nguyen

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, and 12-14 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the Appeal brief filed on 8/26/2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below: George Eng.

Response to Arguments

2. Regarding claims 5-7, 10, 12, and 13, Applicant argues, on pages 7 and 8 of the remarks, that Inubushi et al. do not disclose, teach, or suggest "an external, retractable antenna movably mounted on said internal antenna".

The Examiner respectfully disagrees with Applicant's argument because the current claim language is broad enough to be met by fig.4-5 of Inubushi et al. Even though Inubushi et al. state that element 9 is a member for mounting the external antenna 8 to the housing and electrically connecting it thereto, fig.4-5 of Inubushi et al.

clearly show that element 9 is mounted or is part of the internal antenna 10 and that the external, retractable antenna 8 passes through (i.e., movable) element 9 and the internal antenna 10 during insertion and extraction. Based on these showings, Inubushi et al. meet the claimed limitation of the external, retractable antenna movably mounted on said internal antenna.

Regarding claims 3, 4, 8, 9, and 14, Applicant argues, on pages 8 and 9 of the remarks, that since the conductive tube 9 in Egashira are part of the antenna retaining mechanism, it cannot be a remote RF port.

The Examiner respectfully disagrees with Applicant's argument because Egashira and Swop clearly discloses that when the main antenna element 1 (see Egashira, external, retractable antenna) is inside the case (see Egashira, i.e., retracted), the sub-antenna element 10 (see Egashira, internal antenna) is in contact with the conductive tube 9 to allow a call signal arriving from a calling party to be received by the sub-antenna element 10 (internal antenna) (see Egashira, figures 1, 2a, and 2b, column 3 lines 19-35, and col.3, lines 54 to col. 4 line 19). It is clear from Egashira's description that the device (see Egashira, conductive tube 9) functions as the claimed remote RF port (see Swop, fig.1-2, remote port 113 or 213, and switch accessory 100) that is mechanically connected (see Egashira, conductive tube 9), by the retraction of the main antenna element 1 (see Egashira, external, retractable antenna), to the sub-antenna element 10 (see Egashira, internal antenna) to allow reception of a call signal.

Additionally, Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of the fact noticed (i.e.,

that is notoriously well known in the art to place transceiver circuitry in a printed circuit board (PCB) positioned in a front portion of the housing of a wireless device for enhanced operation).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Inubushi et al. (U.S. Patent # 5,109,539).

Consider claim 5, Inubushi et al. clearly show and disclose a portable radio telephone wireless communication) device (fig. 4-6), comprising:

a housing 1 (figures 4 and 6, col.1, lines 31-34);

a transceiver circuit disposed within said housing 1 (not shown but inherent since a telephone conversation can be carried out with the device) (col.1, lines 45-51);

an internal antenna 10 disposed within said housing 1 (fig.4-5, col.1, lines 36-39);

and

an external, retractable antenna 8 movably mounted on said internal antenna 10 and being movable between a retracted position and an extended position with respect thereto (clearly shown in the front view of fig.4 and the right side view of fig.5, and col.1, lines 33-39);

said internal antenna 10 being in circuit with said transceiver circuit (inherent)
when said external antenna 8 is in its said retracted position (col.1, lines 36-44);

said internal antenna 10 being out of circuit with said transceiver circuit (inherent)
when said external antenna 8 is in its said extended position (col.1, lines 45-49);

said external antenna 8 being in circuit with said transceiver circuit (inherent)
when in its said extended position (col.1, lines 45-49); and

said external antenna 8 being out of circuit with said transceiver circuit (inherent)
when in its said retracted position (col.1, lines 36-44).

Consider claim 6, and as applied to claim 5 above, Inubushi et al. further show
and disclose a change-over switch 11 (switching mechanism) (fig.5) that selectively
connects either said external antenna 8 or said internal antenna 10 to said transceiver
circuit (inherent) (col.1, lines 36-49).

Consider claim 7, and as applied to claim 5 above, Inubushi et al. also disclose
that said internal and external antennas 10, 8 are electrically disconnected from one
another at all times (fig.5-6, col.1, lines 34-36 and 40-49).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 4, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inubushi et al. (U.S. Patent # 5,109,539) in view of Egashira (U.S. Patent # 4,862,182) further in view of Swope (U.S. Patent #5,663,692).

Consider claims 3, 4, 8, and 9, and as applied to claims 5-7 above, Inubushi clearly show and disclose the claimed invention except a remote RF port, provided in said housing, which is mechanically connected to said internal antenna 10.

Egashira clearly shows and discloses a portable radiotelephone comprising, among other elements, a conductive tube 9 (fig. 1, 2a, and 2b), provided in the housing of said portable radiotelephone, which is mechanically connected to sub-antenna element 10 (internal antenna) to allow reception of call signals from calling parties (fig. 1, 2a, and 2b and col. 3, line 20 to col. 4 line 19). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the device taught by Egashira into the device taught by Inubushi et al. for the purpose of enhancing the reception of calling signals.

Insubushi and Egashira fail to specifically disclose a remote RF port. However, Swope teaches a remote RF port (fig. 1-2, remote RF port 113 or 213, col. 2, lines 3-29). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the remote RF port taught by Swop into the device taught by Inubushi et al. and Egashira for the purpose of enhancing the reception of calling signals.

6. Claims 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inubushi et al. (U.S. Patent # 5,109,539) in view of well known prior art (MPEP 2144.03) as applied in the previous Office Action.

Consider claim 10, Inubushi et al. clearly show and disclose a portable radio telephone (wireless communication) device (fig.4-6), comprising:

a housing 1 including a front housing member and a back housing member, said front and back housing member having upper and lower ends (fig.4-6, col.1 lines 31-34);

an internal antenna 10 positioned in said housing 1 adjacent said upper end of said back housing member (fig.4-5, col.1, lines 36-39); and

an external, retractable antenna 8 movably mounted on said internal antenna 10 and being movable between a retracted position and an extended position with respect thereto (clearly shown in the front view of fig.4 and the right side view of fig.5, and col.1, lines 33-39);

said internal antenna 10 being in circuit with a transceiver circuit (inherent) when said external antenna 8 is in its said retracted position (col.1, lines 36-44);

said internal antenna 10 being out of circuit with said transceiver circuit (inherent) when said external antenna 8 is in its said extended position (col.1, lines 45-49);

said external antenna 8 being in circuit with said transceiver circuit (inherent) when in its said extended position (col.1, lines 45-49); and

said external antenna 8 being out of circuit with said transceiver circuit (inherent) when in its said retracted position (col.1, lines 36-44).

However, Inubushi et al. do not specifically disclose that said transceiver circuit is in a printed circuit board (PCB) positioned in said housing 1 adjacent said front housing member.

Nonetheless, the Examiner takes Official Notice that it is notoriously well known in the art to place transceiver circuitry in a PCB positioned in a front portion of the housing of a wireless device for enhanced operation.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to slightly modify the device of Inubushi et al. with well known teachings in the art in order to place said transceiver circuit is in a printed circuit board (PCB) positioned in said housing 1 adjacent said front housing member for enhanced operation.

Consider claim 12, and as applied to claim 10 above, Inubushi et al. further show and disclose a change-over switch 11 (switching mechanism) (figure 5) that selectively connects either said external antenna 8 or said internal antenna 10 to said transceiver circuit (inherent) (column 1 lines 36-49).

Consider claim 13, and as applied to claim 10 above, Inubushi et al. also disclose that said internal and external antennas 10, 8 are electrically disconnected from one another at all times (figures 5 and 6 and column 1 lines 34-36 and 40-49).

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inubushi et al. (U.S. Patent # 5,109,539) in view of well known prior art (MPEP 2144.03), as applied to claim 10 above, further in View of Egashira (U.S. Patent # 4,862,182), and further in view of Swope (U.S. Patent #5,663,692).

Consider claim 14, and as applied to claim 10 above, Inubushi et al., as modified above, clearly show and disclose the claimed invention except a remote RF port which is mechanically connected to said internal antenna 10.

Egashira clearly shows and discloses a portable radiotelephone comprising, among other elements, a conductive tube 9 (figures 1, 2a, and 2b), provided in the housing of said portable radiotelephone, which is mechanically connected to sub-antenna element 10 (internal antenna) to allow reception of call signals from calling parties (figures 1, 2a, and 2b and column 3 line 20 - column 4 line 19). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the device (conductive tube 9) taught by Egashira into the modified device taught by Inubushi et al. for the purpose of enhancing the reception of calling signals.

Insubushi and Egashira fail to specifically disclose a remote RF port. However, Swope teaches a remote RF port (fig. 1-2, remote RF port 113 or 213, col. 2, lines 3-29). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the remote RF port taught by Swop into the device taught by Inubushi et al. and Egashira for the purpose of enhancing the reception of calling signals.

Allowable Subject Matter

8. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the

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base claim and any intervening claims as well as any corrections to the objections made above.


Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571.272.7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khai Nguyen
Au: 2617


GEORGE ENG
SUPERVISORY PATENT EXAMINER

9/14/2006